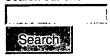


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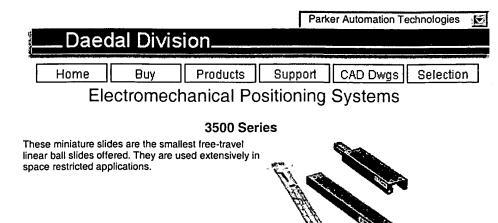
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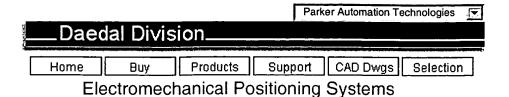
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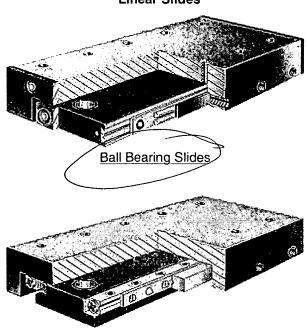
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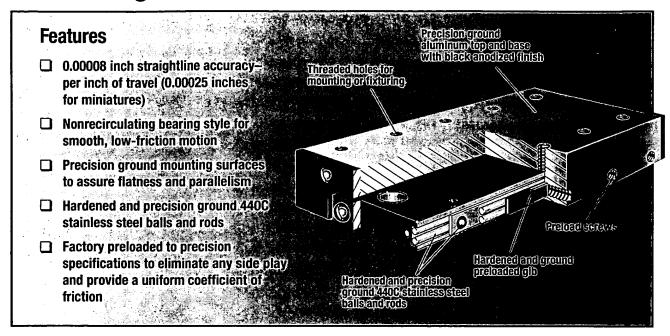


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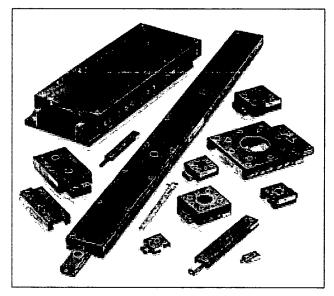
# **Ball Bearing Slides**



Daedal linear slides are the ideal mechanisms for providing smooth, low friction, linear motion. These linear slides are mechanically simple motion devices comprised of two primary elements: a stationary base, and a moveable top carriageseparated by a row of rolling element (non-sliding) bearings. The bearings. located on each side of the base, support the carriage and provide smooth, accurate, low friction motion. Daedal slides are offered with two types of linear bearings: ball bearing and cross roller bearing. The ball bearing offers smooth linear translation at the lowest cost. The cross roller bearing offers greater load carrying capability.

Because these bearing styles employ nonrecirculating rolling elements there is virtually no mechanical vibration and a very low coefficient of friction. Since there is no sliding contact between the top and bottom members. Daedal slides are much more reliable than dovetail slides. They eliminate the wear problems, lubrication requirements, and "stiction" (skipping and jumping caused by the increased force needed to initiate movement) normally associated with the higher friction slides.

Each linear ball bearing is comprised of a row of hardened steel balls captured between four hardened and ground precision steel rods (two each on the base and top).

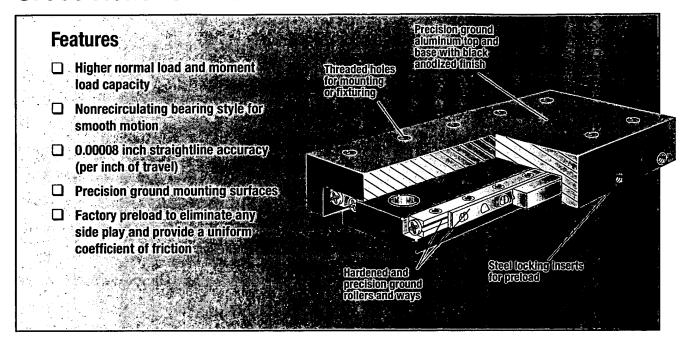


These linear ball bearing assemblies are factory preloaded to eliminate side play and meet precision specifications.

Daedal ball slides are offered in many different sizes and styles. Proper sizing and selection is based on travel, load, size, mounting requirements, and open aperture or solid top construction.

Use the selection chart on page D4 to select the ball bearing slide series with the appropriate travel and load capacity. Refer to the series specification page for complete performance and mechanical information to make the final selection. To order, use corresponding model number.

### **Cross Roller Slides**

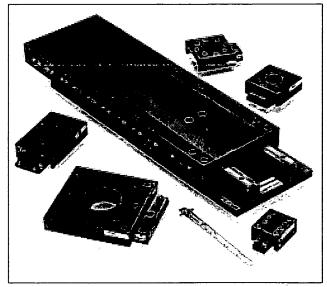


The cross roller slide has nearly twice the load capacity of a ball bearing slide of comparable size. It is similar to the ball bearing slide— having two nonrecirculating bearings to support and guide the moveable top carriage over the stationary base.

The cross roller bearing, however, is comprised of two rows of cylindrical rollers instead of balls. Each roller is alternately crisscrossed (at 90°) with the next, and captured between "V" grooved bearing racesone located on the stationary base and one on the moving top carriage. Higher load capacity is achieved as a result of having a larger contact surface (line contact) than the ball bearing type (point contact).

Daedal cross roller slides are constructed of corrosionresistant black anodized aluminum and high carbon steel. These building materials provide optimized stiffness and thermal stability without excessive mass. Base and top mounting surfaces are precision ground to assure flatness and parallelism. Cross roller slides are preloaded during the manufacturing process to eliminate any side play and to provide a uniform coefficient of friction.

A variety of modifications to standard models are available to meet custom requirements. Contact our application engineering department with your design specifications.



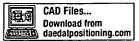
Use the selection chart on the following page to select the cross roller slide series with the appropriate travel and load capacity. Refer to the series specification page for complete performance and mechanical information to make the final selection. To order, use corresponding model number.

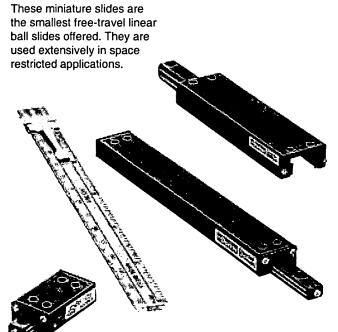


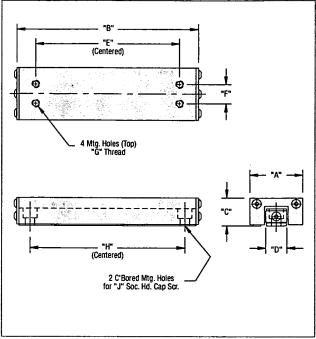
### **Linear Slide Selection Guide**

| Trav<br>inches | /el<br>mm | Load C | apacity<br>kg | Wi<br>in | idth<br>mm | Bearing<br>Type | Mod<br>English | del<br>Metric | Page<br>Number |
|----------------|-----------|--------|---------------|----------|------------|-----------------|----------------|---------------|----------------|
| 0.50           | 12,7      | 4      | 2             | 0.59     | 15,0       | Ball            | 3505-05        | <del>-</del>  | D5             |
| 0.50           | 12,7      | 6      | 3             | 1.25     | 31,8       | Ball            | 3901           | M3901         | D6             |
| 0.50           | 12,7      | 8      | 4             | 0.75     | 19,1       | Ball            | 3507-05        | _             | D5             |
| 0.50           | 12,7      | 10     | 5             | 1.00     | 25,4       | Ball            | 3510-05        |               | D5             |
| 0.75           | 19,1      | 15     | 7             | 1.06     | 26,9       | Ball            | 3511-07        | _             | D5             |
| 1.00           | 25,4      | 8      | 4             | 0.59     | 15,0       | Ball            | 3505-10        | <del></del>   | D5             |
| 1.00           | 25,4      | 10     | 5             | 0.75     | 19,1       | Ball            | 3507-10        |               | D5             |
| 1.00           | 25,4      | 12     | 5             | 1.00     | 25,4       | Ball            | 3510-10        |               | D5             |
| 1.00           | 25,4      | 25     | 11            | 1.75     | 44,5       | Ball            | 4001           | M4001         | D6             |
| 1.00           | 25,4      | 28     | 13            | 1.75     | 44,5       | Ball            | 4101           | M4101         | D6             |
| 1.00           | 25,4      | 40     | 18            | 2.62     | 66,5       | Ball            | 4501           | M4501         | D6             |
| 1.00           | 25,4      | 50     | 23            | 1.75     | 44,5       | Cross Roller    | CR4001         |               | D6             |
| 1.00           | 25,4      | 56     | 25            | 1.75     | 44,5       | Cross Roller    | CR4101         | <del>-</del>  | D6             |
| 1.00           | 25,4      | 88     | 40            | 2.62     | 66,5       | Cross Roller    | CR4500         |               | D6             |
| 1.50           | 38,1      | 18     | 8             | 1.06     | 26,9       | Ball            | 3511-15        | _             | D5             |
| 2.00           | 50,8      | 12     | 5             | 0.59     | 15,0       | Ball            | 3505-20        | <del>-</del>  | D5             |
| 2.00           | 50,8      | 12     | 5             | 0.75     | 19,1       | Ball            | 3507-20        | _             | D5             |
| 2.00           | 50,8      | 15     | 7             | 1.00     | 25,4       | Ball            | 3510-20        | <del>-</del>  | D5             |
| 2.00           | 50,8      | 20     | 9             | 1.06     | 26,9       | Ball            | 3511-20        |               | D5             |
| 2.00           | 50,8      | 40     | 18            | 1.75     | 44,5       | Ball            | 4201           | M4201         | D8             |
| 2.00           | 50,8      | 60     | 27            | 1.75     | 44,5       | Cross Roller    | CR4201         |               | D8             |
| 2.00           | 50,8      | 60     | 27            | 5.00     | 127,0      | Bali            | 4900-02        | M4900-02      | D9             |
| 2.00           | 50,8      | 64     | 29            | 2.62     | 66,5       | Ball            | 4601           | M4601         | D8             |
| 2.00           | 50,8      | 128    | 58            | 2.62     | 66,5       | Cross Roller    | CR4601         | . —           | D8             |
| 3.00           | 76,2      | 14     | 6             | 0.59     | 15,0       | Ball            | 3505-30        |               | D5             |
| 3.00           | 76,2      | 14     | 6             | 0.75     | 19,1       | Bail            | 3507-30        | <del>-</del>  | D5             |
| 3.00           | 76,2      | 25     | 11            | 1.06     | 26,9       | Bail            | 3511-30        | _             | D5             |
| 3.00           | 76,2      | 55     | 25            | 1.75     | 44,5       | Ball            | 4301           | M4301         | D8             |
| 3.00           | 76,2      | 95     | 43            | 2.62     | 66,5       | Ball            | 4701           | M4701         | D8             |
| 3.00           | 76,2      | 95     | 43            | 5.00     | 127,0      | Ball            | 4400           | M4400         | D6             |
| 3.00           | 76,2      | 100    | 45            | 1.75     | 44,5       | Cross Roller    | CR4301         | _             | D8             |
| 3.00           | 76,2      | 120    | 55            | 5.00     | 127,0      | Cross Roller    | CR4400         |               | D6             |
| 3.00           | 76,2      | 190    | 86            | 2.62     | 66,5       | Cross Roller    | CR4701         | _             | D8             |
| 4.00           | 101,6     | 30     | 14            | 1.06     | 26,9       | Bail            | 3511-40        | _             | D5             |
| 4.00           | 101,6     | 100    | 45            | 6.00     | 152,4      | Ball            | 4900-04        | M4900-04      | D9             |
| 4.00           | 101,6     | 122    | 55            | 2.62     | 66,5       | Ball            | 4801           | M4801         | D8             |
| 4.00           | 101,6     | 200    | 91            | 6.00     | 152,4      | Cross Roller    | CR4900-04      | _             | D9             |
| 4.00           | 101,6     | 244    | 111           | 2.62     | 66,5       | Cross Roller    | CR4801         | <del></del> , | D8             |
| 6.00           | 152,4     | 110    | 50            | 6.00     | 152,4      | Ball            | 4900-06        | M4900-06      | D9             |
| 6.00           | 152,4     | 147    | 67            | 2.62     | 66,5       | Ball            | 4606           |               | D8             |
| 6.00           | 152,4     | 220    | 100           | 6.00     | 152,4      | Cross Roller    | CR4900-06      |               | D9             |
| 8.00           | 203,2     | 120    | 55            | 6.00     | 152,4      | Ball            | 4900-08        | M4900-08      | D9             |
| 8.00           | 203,2     | 240    | 109           | 6.00     | 152,4      | Cross Roller    | CR4900-08      |               | D9             |
| 9.00           | 228,6     | 184    | 84            | 2.62     | 66,5       | Ball            | 4609           |               | D8             |
| 10.00          | 254,0     | 130    | 59            | 6.00     | 152,4      | Ball            | 4900-10        | M4900-10      | D9             |
| 10.00          | 254,0     | 260    | 118           | 6.00     | 152,4      | Cross Roller    | CR4900-10      |               | D9             |
| 12.00          | 304,8     | 140    | 64            | 6.00     | 152,4      | Ball            | 4900-12        | M4900-12      | D9             |
| 12.00          | 304,8     | 205    | 93            | 2.62     | 66,5       | Ball            | 4612           | _             | D8             |
| 12.00          | 304,8     | 280    | 127           | 6.00     | 152,4      | Cross Roller    | CR4900-12      |               | D9             |
| 15.00          | 381,0     | 225    | 102           | 2.62     | 66,5       | Ball            | 4615           |               | D8             |
| 18.00          | 457,2     | 250    | 114           | 2.62     | 66,5       | Ball            | 4618           |               | D8             |
| 21.00          | 533,4     | 272    | 124           | 2.62     | 66,5       | Ball            | 4621           |               | D8             |
| 24.00          | 609,6     | 305    | 139           | 2.62     | 66,5       | Ball            | 4624           |               | D8             |
| 27.00          | 685,8     | 330    | 150           | 2.62     | 66,5       | Ball            | 4627           |               | D8             |
| 30.00          | 762,0     | 355    | 161           | 2.62     | 66,5       | Ball            | 4630           |               | D8             |

## 3500 Series Miniature Ball Bearing Slides





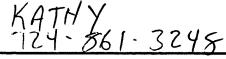


### **Specifications**

Straightline Accuracy: 0.00025 in/in

| -       |                 | Load Cap | acity* (lbs. | )               |      |      |     |     |               | 1. * | 9. 7s |      |    |
|---------|-----------------|----------|--------------|-----------------|------|------|-----|-----|---------------|------|-------|------|----|
| Model   | Travel (inches) | Normal   | Inverted     | Weight<br>(lbs) | Α    | В    | С   | D   | E<br>(inches) | F    | G     | - H  | J  |
| 3505-05 | 0.5             | 4        | 2            | 0.03            | .59  | 1.12 | .32 | .24 | 0.63          | .22  | #2-56 | 0.75 | #2 |
| 3505-10 | 1.0             | 8        | 4            | 0.04            | .59  | 2.12 | .32 | .24 | 1.63          | .22  | #2-56 | 1.38 | #2 |
| 3505-20 | 2.0             | 12       | 6            | 0.06            | .59  | 3.12 | .32 | .24 | 2.63          | .22  | #2-56 | 2.38 | #2 |
| 3505-30 | 3.0             | 14       | 7            | 0.08            | .59  | 4.12 | .32 | .24 | 3.63          | .22  | #2-56 | 3.38 | #2 |
| 3507-05 | 0.5             | 8        | 4            | 0.04            | .75  | 1.12 | .40 | .28 | 0.63          | .38  | #2-56 | 0.75 | #2 |
| 3507-10 | 1.0             | 10       | 5            | 0.06            | .75  | 2.12 | .40 | .28 | 1.63          | .38  | #2-56 | 1.38 | #2 |
| 3507-20 | 2.0             | 12       | 6            | 0.08            | .75  | 3.12 | .40 | .28 | 2.63          | .38  | #2-56 | 2.38 | #2 |
| 3507-30 | 3.0             | 14       | 7            | 0.10            | .75  | 4.12 | .40 | .28 | 3.63          | .38  | #2-56 | 3.38 | #2 |
| 3510-05 | 0.5             | 10       | 5            | 0.10            | 1.00 | 1.68 | .50 | .36 | 1.25          | .44  | #6-32 | 1.25 | #4 |
| 3510-10 | 1.0             | 12       | 6            | 0.12            | 1.00 | 2.68 | .50 | .36 | 2.25          | .44  | #6-32 | 2.25 | #4 |
| 3510-20 | 2.0             | 15       | 7            | 0.14            | 1.00 | 3.68 | .50 | .36 | 3.25          | .44  | #6-32 | 3.25 | #4 |
| 3511-07 | 0.75            | 15       | 8            | 0.08            | 1.06 | 1.68 | .53 | .42 | 1.25          | .44  | #6-32 | 1.13 | #6 |
| 3511-15 | 1.5             | 18       | 9            | 0.14            | 1.06 | 2.68 | .53 | .42 | 2.25          | .44  | #6-32 | 2.13 | #6 |
| 3511-20 | 2.0             | . 20     | 10           | 0.20            | 1.06 | 3.68 | .53 | .42 | 3.25          | .44  | #6-32 | 3.13 | #6 |
| 3511-30 | 3.0             | 25       | 13           | 0.26            | 1.06 | 4.68 | .53 | .42 | 4.00          | .44  | #6-32 | 3.25 | #6 |
| 3511-40 | 4.0             | 30       | 15           | 0.32            | 1.06 | 6.68 | .53 | .42 | 5.50          | .44  | #6-32 | 4.00 | #6 |

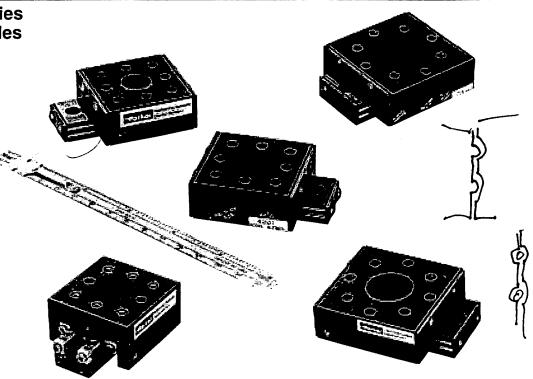
\*For moment load ratings, refer to Daedal's web site.





### 3900 and 4000 Series Square Profile Slides

These linear ball bearing and cross roller bearing slides are designed with a square face mounting surface, and compatible mounting hole arrangements to facilitate easy "stacking" for multi-axis requirements. They are utilized as the primary element for Daedal's single—and multi-axis linear positioners.



#### **Specifications**

Straightline Accuracy: English 0.00008 in/in Metric: 2 µm/25 mm

| Ball Bearin | ıg -              | 7       |               | Load C  | apacity  | Aperture |         | -      |
|-------------|-------------------|---------|---------------|---------|----------|----------|---------|--------|
|             | Model             | Travel  | Size-(Square) | Normal  | Inverted | Diameter | Weight  | Figure |
|             | 3901              | 0.5 in  | 1.25 in       | 6 lb    | 3 lb     | 0.25 in  | 0.10 lb | Α      |
|             | 3905              | 0.5 in  | 1.25 in       | 6 lb    | 3 lb     | none     | 0.10 lb | Α      |
|             | <del>6</del> 4001 | 1.0 in  | 1.75 in       | 25 lb   | 13 lb    | none     | 0.20 lb | В      |
| English     | 4005              | 1.0 in  | 1.75 in       | 25 lb   | 13 lb    | 0.50 in  | 0.20 lb | В      |
|             | 4501              | 1.0 in  | 2.62 in       | 40 lb   | 20 lb    | none     | 0.60 lb | С      |
|             | 4505              | 1.0 in  | 2.62 in       | 40 lb   | 20 lb    | 1.00 in  | 0.50 lb | С      |
|             | 4410              | 3.0 in  | 5.00 in       | 95 lb   | 48 lb    | none     | 2.20 lb | D      |
|             | 4450              | 3.0 in  | 5.00 in       | 95 lb   | 48 lb    | 2.00 in  | 1.70 lb | D      |
|             | M3901             | 12,5 mm | 31,8 mm       | 2,7 kg  | 1,4 kg   | 6,2 mm   | 0,05 kg | Α      |
|             | M3905             | 12,5 mm | 31,8 mm       | 2,7 kg  | 1,4 kg   | none     | 0,05 kg | Α      |
|             | M4001             | 25,0 mm | 44,4 mm       | 11,0 kg | 6,0 kg   | none     | 0,09 kg | В      |
| Metric      | M4005             | 25,0 mm | 44,4 mm       | 11,0 kg | 6,0 kg   | 12,5 mm  | 0,09 kg | В      |
|             | M4501             | 25,0 mm | 66,5 mm       | 18,2 kg | 9,1 kg   | none     | 0,27 kg | С      |
|             | M4505             | 25,0 mm | 66,5 mm       | 18,2 kg | 9,1 kg   | 25,4 mm  | 0,23 kg | С      |
|             | M4410             | 75,0 mm | 127,0 mm      | 43,2 kg | 21,8 kg  | none     | 1,00 kg | D      |
|             | M4450             | 75,0 mm | 127,0 mm      | 43,2 kg | 21,8 kg  | 50,0 mm  | 0,77 kg | D      |

| Cross Rolle | er Bearing |        |               | Load C | Capacity | Aperture |         |        |
|-------------|------------|--------|---------------|--------|----------|----------|---------|--------|
|             | Model      | Travel | Size-(Square) | Normal | Inverted | Diameter | Weight  | Figure |
|             | CR4001     | 1.0 in | 1.75 in       | 50 lb  | 25 lb    | none     | 0.20 lb | В      |
|             | CR4501     | 1.0 in | 2.62 in       | 88 lb  | 44 lb    | none     | 0.80 lb | C      |
| English     | CR4505     | 1.0 in | 2.62 in       | 88 lb  | 44 lb    | 1.00 in  | 0.70 lb | С      |
| •           | CR4410     | 3.0 in | 5.00 in       | 120 lb | 60 lb    | none     | 2.20 lb | D      |
|             | CR4450     | 3.0 in | 5.00 in       | 120 lb | 60 lb    | 2.00 in  | 1.70 lb | D      |

#### CAD Files... 3900 and 4000 Series Square Profile Slide Dimensions in (mm) Download from daedalpositioning.com 4 Mtg. Holes (Top) English Models = #6-32 Metric Models = M4 Figure A Figure B 1.00 (25,0) (4000, M4000, CR4000) (3900, M3900 series) 6 Mtg. Holes (Top) English Models = #4-40 Metric Models = M3 4 Mtg. Holes (Top) on 1.12 (30,0) Dia. B.C. English Models = #6-32 Thd. Metric Models = M4 Thd. 1,28 (32.5) ⊕ • ⊕∵⊕ 2 C'Bored Mtg. Holes (Base) English Models = #4 S.H.C.S. Metric Models = M3 S.H.C.S. 2 C'Bored Mtg. Holes (Base) English Models = #6 S.H.C.S. Metric Models = M4 S.H.C.S. Ø Figure C Figure D (4500, M4500, CR4500) (4400, M4400, CR4400) 4.00(100.0) Ord Ø 8 Mtg. Holes (Top) on 2.00 (50,0) Dia. B.C. English Models = #10-32 Metric Models = M5 8 Mtg. Holes (Top) on 4.00 (100,0) Dia. B.C. English Models = 1/4-20 Metric Models = M6 4 Mtg. Holes (Top) English Models = 1/4-20 Metric Models = M6 \_ 5.0 \_ (127,0) \_ 5.0 \_ (127,0) **⊕** 1.0 (25,4) 2 C'Bored Mtg. Holes (Base) English Models = 1/4 S.H.C.S Metric Models = M6 S.H.C.S. 50.0 (12,7) 4501/M4501 & 4505/M4505 4001/M4001 & 4005/M4005 7.00 17.78 4.00 10.16 **Moment Load Capacity** 35.56 14.00 20.32 8.00 17,78 7.00 30,48 12.00 6.00 15,24 3.50 8,89 15.24 6.00 3.00 7.62 5.00 12,70 25,40 10.0 12,70 5.00 2.50 6,35 Yaw Yaw 20 32 8.00 4.00 10.16 2.00 5,08 10,16 4.00 15,24 6.00 3.00 7,62 7,62 3.00 1.50 3,81 Pitch 2.00 5.08 10,16 4.00 1.00 2,54 5,08 2.00 5,08 2.00 1.00 2,54 2,54 1.00 0.50 1,27 Roll 17 19 21 23 25 (lbs) Load 76 85 94 102 111 (N) (force) 4 8 12 16 20 24 28 32 36 40 (fbs) Load 17,8 35,6 53,4 71,2 89,0 106,8 124,6 142,4 150,2 178,0 (A) (force (moment arm) (moment arm) cm in 17,78 7.00 (moment arm) In cm 3.50 8,89 CR4001 3901/M3901 & 3905/M3905 CR4501 & CR4505 cm in 15,24 6.00 1.25 15.24 6.00 3.00 7.62 12,70 5.0 2.50 6,35 12,70 5.00 381 150 0.75 1.91 2.00 5,08 10,16 4.00 7,62 3.00 1.50 3.81 2,54 1.0 0.50 1,27 5,08 2.00 1.00 2,54 0.25 0,64 2.54 1.00 0.50 1.27 6 (fbs) Load 26,70 (N) (force) 5 10 15 20 25 30 35 40 45 50 (lbs) Load 22.3 44.5 66.8 89.0 111,3 133,5 155.8 178.0 200,3 222,5 (N) (force) (moment arm) In cm (moment arm) cm in (moment arm) cm in 4410/M4410 & 4450/M4450 CR4410 & CR4450 45,72 18.00 40 64 16.00 8.00 20,32 35,56 14.00 7.00 17,78 30,48 12.00 38.10 15.00 7.50 19.05 25.40 10.0 5.00 12.70 4.00 10,16 5.00 12,70 15,24 6.00 3.00 7,62 10,16 4.00 2.00 5,08



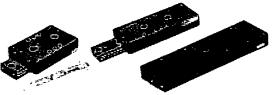
10 20 30 40 47 57 67 77 67 95 (tbs) Load 44,5 69.0 133,5 178.0 209.2 253,7 298.2 342,7 387,2 422,8 (N) (force)

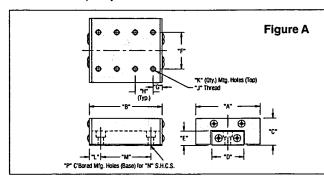
20 30 40 50 60 70 80 90 100 110 120 (lbs) Load 89 134 178 223 267 312 356 401 445 490 534 (N) (force)

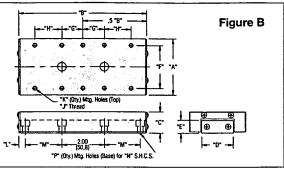
### **4000 Series Extended Travel Slides**

These linear ball bearing and cross roller bearing slides have the same cross sectional sizes as the square profile slides, but offer longer travels and heavier load capacity.









#### Specifications\*

Straightline Accuracy: English 0.00008 in/in Metric: 2 µm/25 mm

| FR. all | CAD Files             |
|---------|-----------------------|
|         | Download from         |
|         | daedalpositioning.com |

| Ball B  | earing |              | Lo  | ad Capac       | itv   |        |      | 1, 1     |      |      |      | Dim      | ension         | s    |       |    | 7.   |      |     |   |
|---------|--------|--------------|-----|----------------|-------|--------|------|----------|------|------|------|----------|----------------|------|-------|----|------|------|-----|---|
|         | Model  | Travel<br>in |     | Inverted<br>lb | •     | Figure | A    | <b>B</b> | C    | D    | Ε.   | F        | G<br>ts: inche | H    | J     | K  | Ļ    | M    | N   | P |
|         | 4101   | 1.0          | 28  | 14             | 0.2   | Α      | 1.75 | 2.00     | 0.75 | 0.88 | 0.40 | 1.00     | 0.25           | 0.50 | 6-32  | 8  | 0.31 | 1.38 | #6  | 2 |
|         | 4201   | 2.0          | 40  | 20             | 0.4   | Α      | 1.75 | 3.00     | 0.75 | 0.88 | 0.40 | 1.00     | 0.25           | 0.50 | 6-32  | 12 | 0.31 | 2.38 | #6  | 2 |
|         | 4301   | 3.0          | 55  | 28             | 0.6   | Α      | 1.75 | 4.00     | 0.75 | 0.88 | 0.40 | 1.00     | 0.25           | 0.50 | 6-32  | 16 | 0.31 | 3.38 | #6  | 2 |
|         | 4601   | 2.0          | 64  | 32             | 0.9   | В      | 2.62 | 4.00     | 1.00 | 1.48 | 0.61 | 2.00     | 0.50           |      | 10-32 | 6  | 0.31 | 0.69 | .25 | 4 |
|         | 4701   | 3.0          | 95  | 47             | 1.1   | В      | 2.62 | 5.00     | 1.00 | 1.48 | 0.61 | 2.00     | 1.00           |      | 10-32 | 6  | 0.31 | 1.19 | .25 | 4 |
|         | 4801   | 4.0          | 122 | 61             | 1.4   | В      | 2.62 | 6.00     | 1.00 | 1.48 | 0.61 | 2.00     | 0.50           | 1.00 | 10-32 | 10 | 0.31 | 1.69 | .25 | 4 |
| English | 4606   | 6.0          | 147 | 74             | 2.3   | Α      | 2.62 | 9.00     | 1.00 | 0.94 | 0.69 | 2.00     | 1.50           | 2.00 | 10-32 | 8  | 1.00 | 3.50 | .25 | 3 |
|         | 4609   | 9.0          | 184 | 92             | 3.1   | Α      | 2.62 | 12.00    | 1.00 | 0.94 | 0.69 | 2.00     | 1.00           | 2.00 | 10-32 | 12 | 1.00 | 5.00 | .25 | 3 |
|         | 4612   | 12.0         | 205 | 103            | 3.9   | Α      | 2.62 | 15.00    | 1.00 | 0.94 | 0.69 | 2.00     | 1.50           | 2.00 | 10-32 | 14 | 1.00 | 3.25 | .25 | 5 |
|         | 4615   | 15.0         | 225 | 113            | 4.7 . | Α      | 2.62 | 18.00    | 1.00 | 0.94 | 0.69 | 2.00     | 1.00           | 2.00 | 10-32 | 18 | 1.00 | 4.00 | .25 | 5 |
|         | 4618   | 18.0         | 250 | 125            | 5.6   | Α      | 2.62 | 21.00    | 1.00 | 0.94 | 0.69 | 2.00     | 1.50           | 2.00 | 10-32 | 20 | 1.00 | 4.75 | .25 | 5 |
|         | 4621   | 21.0         | 272 | 136            | 6.5   | Α      | 2.62 | 24.00    | 1.00 | 0.94 | 0.69 | 2.00     | 1.00           | 2.00 | 10-32 | 24 | 1.00 | 5.50 | .25 | 5 |
|         | 4624   | 24.0         | 305 | 153            | 7.3   | Α      | 2.62 | 27.00    | 1.00 | 0.94 | 0.69 | 2.00     | 1.50           | 4.00 | 10-32 | 14 | 1.50 | 4.00 | .25 | 7 |
|         | 4627   | 27.0         | 330 | 165            | 8.2   | Α      | 2.62 | 30.00    | 1.00 | 0.94 | 0.69 | 2.00     | 1.00           | 4.00 | 10-32 | 16 | 1.50 | 4.50 | .25 | 7 |
|         | 4630   | 30.0         | 355 | 178            | 8.9   | Α      | 2.62 | 33.00    | 1.00 | 0.94 | 0.69 | 2.00     | 0.50           | 4.00 | 10-32 | 18 | 1.50 | 5.00 | .25 | 7 |
|         |        | mm           | kg  | kg             | kg    |        |      |          |      |      |      | units: a | nillimete      | ers  |       |    |      |      |     |   |
|         | M4101  | 25,0         | 13  | 7              | 0,09  | A      | 44,4 | 50,8     | 19,0 | 22,3 | 10,1 | 25,0     | 12,9           | 12,5 | M4    | 6  | 7,8  | 35,0 | M4  | 2 |
|         | M4201  | 50,0         | 18  | 9              | 0,18  | Α      | 44,4 | 76,2     | 19,0 | 22,3 | 10,1 | 25,0     | 13,1           | 12,5 | M4    | 10 | 8,1  | 60,0 | M4  | 2 |
| Motric  | M4301  | 75,0         | 25  | 13             | 0,27  | Α      | 44,4 | 101,6    | 19,0 | 22,3 | 10,1 | 25,0     | 13,3           | 12,5 | M4    | 14 | 8,3  | 85,0 | M4  | 2 |
| Metric  | M4601  | 50,0         | 29  | 15             | 0,41  | В      | 66,5 | 101,6    | 25,4 | 37,6 | 15,5 | 50,0     | 12,5           | _    | M5    | 6  | 13,3 | 12,5 | М6  | 4 |
|         | M4701  | 75,0         | 43  | 22             | 0,50  | В      | 66,5 | 127,0    | 25,4 | 37,6 | 15,5 | 50,0     | 25,0           | _    | M5    | 6  | 13,5 | 25,0 | M6  | 4 |
|         | M4801  | 100,0        | 55  | 28             | 0,64  | В      | 66,5 | 152,4    | 25,4 | 37,6 | 15,5 | 50,0     | 12,5           | 25,0 | M5    | 10 | 26,2 | 25,0 | M6  | 4 |

| Cross    | Roller B | earing       | j L          | ad Capac       | ity          |        |      |      |      |      |      | Din     | nensio          | ns      |       |    |      |      |     |   |
|----------|----------|--------------|--------------|----------------|--------------|--------|------|------|------|------|------|---------|-----------------|---------|-------|----|------|------|-----|---|
|          | Model    | Travel<br>in | Normai<br>Ib | inverted<br>lb | Weight<br>lb | Figure | A    | В    | C    | D    | E    | F<br>un | G<br>its: inche | H<br>es | J     | K  | L    | M    | N   | P |
|          | CR4101   | 1.0          | 56           | 28             | 0.2          | Α      | 1.75 | 2.00 | 1.00 | 0.75 | 0.50 | 1.00    | 0.25            | 0.50    | 6-32  | 8  | 0.31 | 1.38 | #6  | 2 |
| •        | CR4201   | 2.0          | 60           | 30             | 0.4          | Α      | 1.75 | 3.00 | 1.00 | 0.75 | 0.50 | 1.00    | 0.25            | 0.50    | 6-32  | 8  | 0.31 | 2.38 | #6  | 2 |
| English- | CR4301   | 3.0          | 100          | 50             | 0.6          | Α      | 1.75 | 4.00 | 1.00 | 0.75 | 0.50 | 1.00    | 0.25            | 0.50    | 6-32  | 8  | 0.31 | 3.38 | #6  | 2 |
| English  | CR4601   | 2.0          | 128          | 64             | 0.9          | В      | 2.62 | 4.00 | 1.00 | 1.68 | 0.61 | 2.00    | 0.50            | _       | 10-32 | 6  | 0.31 | 0.69 | .25 | 4 |
|          | CR4701   | 3.0          | 190          | 95             | 1.1          | В      | 2.62 | 5.00 | 1.00 | 1.68 | 0.61 | 2.00    | 1.00            | -       | 10-32 | 6  | 0.31 | 1.19 | .25 | 4 |
| •        | CR4801   | 4.0          | 244          | 122            | 1.4          | В      | 2.62 | 6.00 | 1.00 | 1.68 | 0.61 | 2.00    | 0.50            | 1.00    | 10-32 | 10 | 0.31 | 1.69 | .25 | 4 |

<sup>\*</sup> For additional specifications, including moment loading capacities and other engineering references, please refer to product information on Daedal's web site.



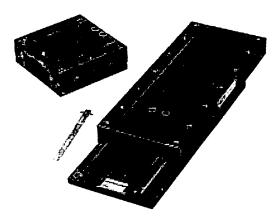
### **4900 Series Heavy Duty Slides**

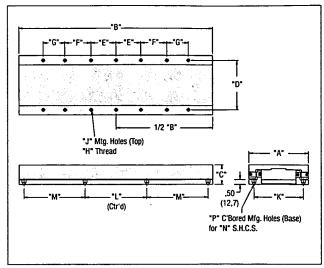
CAD Files...

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These linear slides are the larger, more rugged versions of Daedal's nonrecirculating ball bearing and cross roller bearing slides. A wider

footprint combined with larger bearing elements permit precise, effortless, linear translation of payloads as great as 280 pounds.





### Specifications\*

Straightline Accuracy: English 0.00008 in/in Metric: 2 µm/25 mm

| Ball B  | earing   |              | L            | oad Capaci     | ly           | *     |       |      |      |      | D     | imens          | ions      |    |      | •    | .P. 4 |     |   |
|---------|----------|--------------|--------------|----------------|--------------|-------|-------|------|------|------|-------|----------------|-----------|----|------|------|-------|-----|---|
|         | Model    | Travel<br>in | Normal<br>lb | Inverted<br>Ib | Weight<br>lb | A     | В     | C    | D    | E    | F     | G<br>units: In | H<br>ches |    | K    | L    | M     | N   | P |
|         | 4900-02  | 2.0          | 60           | 30             | 3.0          | 5.00  | 5.00  | 1.75 | 4.00 | 2.00 | _     |                | .25-20    | 6  | 4.00 | 4.00 | _     | .25 | 4 |
|         | 4900-04  | 4.0          | 100          | 50             | 5.0          | 6.00  | 6.00  | 2.00 | 5.00 | 2.50 | _     | _              | .25-20    | 6  | 5.00 | 5.00 | _     | .25 | 4 |
|         | 4900-06  | 6.0          | 110          | 55             | 7.0          | 6.00  | 9.00  | 2.00 | 5.00 | 2.50 | 1.50  |                | .25-20    | 10 | 5.00 | 5.00 | 1.50  | .25 | 8 |
| English | 4900-08  | 8.0          | 120          | 60             | 9.0          | 6.00  | 12.00 | 2.00 | 5.00 | 2.50 | 2.50  | _              | .25-20    | 10 | 5.00 | 5.00 | 3.00  | .25 | 8 |
|         | 4900-10  | 10.0         | 130          | 65             | 11.0         | 6.00  | 15.00 | 2.00 | 5.00 | 2.50 | 2.50  | 2.00           | .25-20    | 14 | 5.00 | 6.00 | 4.00  | .25 | 8 |
|         | 4900-12  | 12.0         | 140          | 70             | 13.0         | 6.00  | 18.00 | 2.00 | 5.00 | 2.50 | 5.00  | 1.00           | .25-20    | 14 | 5.00 | 7.00 | 5.00  | .25 | 8 |
|         |          | mm           | kg           | kg             | kg           |       |       |      |      |      | unit  | s: milli       | meters    |    |      |      |       |     |   |
|         | M4900-02 | 50,0         | 27           | 13             | 1,4          | 127,0 | 127,0 | 44,5 | 100  | 50   | _     | _              | M6        | 6  | 100  | 100  | _     | М6  | 4 |
|         | M4900-04 | 100,0        | 45           | 23             | 2,3          | 152,4 | 152,4 | 50,8 | 125  | 62,5 | _     | _              | M6        | 6  | 125  | 125  | _     | M6  | 4 |
| Metric  | M4900-06 | 150,0        | 50           | 25             | 3,0          | 152,4 | 228,6 | 50,8 | 125  | 62,5 | 37,5  | _              | M6        | 10 | 125  | 125  | 37,5  | М6  | 8 |
|         | M4900-08 | 200,0        | 55           | 27             | 4,0          | 152,4 | 304,8 | 50,8 | 125  | 62,5 | 62,5  | _              | M6        | 10 | 125  | 125  | 75,0  | M6  | 8 |
|         | M4900-10 | 250,0        | 59           | 28             | 5,0          | 152,4 | 381,0 | 50,8 | 125  | 62,5 | 62,5  | 50,0           | М6        | 14 | 125  | 150  | 100,0 | M6  | 8 |
|         | M4900-12 | 300,0        | 64           | 32             | 6,0          | 152,4 | 457,2 | 50,8 | 125  | 62,5 | 125,0 | 25,0           | M6        | 14 | 125  | 175  | 125,0 | M6  | 8 |

| Cross   | Roller Bea | aring        | Lo           | ad Capacit     | ty           |      |       |      |      |      | D    | imens          | sions      |    |      |      |      |     |   |
|---------|------------|--------------|--------------|----------------|--------------|------|-------|------|------|------|------|----------------|------------|----|------|------|------|-----|---|
|         | Model      | Travel<br>In | Normal<br>Ib | Inverted<br>lb | Weight<br>lb | Α .  | В     | C    | D    | E    | F    | G<br>units: Ir | H<br>nches | J  | K    | L    | M    | N   | P |
|         | CR4900-04  | 4.0          | 200          | 100            | 5.0          | 6.00 | 6.00  | 2.00 | 5.00 | 2.50 |      |                | .25-20     | 6  | 5.00 | 5.00 |      | .25 | 4 |
|         | CR4900-06  | 6.0          | 220          | 110            | 7.5          | 6.00 | 9.00  | 2.00 | 5.00 | 2.50 | 1.50 | _              | .25-20     | 10 | 5.00 | 5.00 | 1.50 | .25 | 8 |
| English | CR4900-08  | 8.0          | 240          | 120            | 9.0          | 6.00 | 12.00 | 2.00 | 5.00 | 2.50 | 2.50 | _              | .25-20     | 10 | 5.00 | 5.00 | 3.00 | .25 | 8 |
|         | CR4900-10  | 10.0         | 260          | 130            | 11.0         | 6.00 | 15.00 | 2.00 | 5.00 | 2.50 | 2.50 | 2.00           | .25-20     | 14 | 5.00 | 6.00 | 4.00 | .25 | 8 |
|         | CR4900-12  | 12.0         | 280          | 140            | 13.0         | 6.00 | 18.00 | 2.00 | 5.00 | 2.50 | 5.00 | 1.00           | .25-20     | 14 | 5.00 | 7.00 | 5.00 | .25 | 8 |

<sup>\*</sup> For additional specifications, including moment loading capacities and other engineering references, please refer to product information on Daedal's web site.





#### The Results of Your Search

The results listed below are based on your search criteria. Review the list, fill in the desired quantities, and select "Check Availability". All prices are in US dollars.

|    | Quantity | Part #  | Description | Price | Shipping Date |
|----|----------|---------|-------------|-------|---------------|
| 1  |          | 3505-05 | BALL SLIDE  | \$71  |               |
| 2  |          | 3505-10 | BALL SLIDE  | \$87  |               |
| 3  | <b>.</b> | 3505-20 | BALL SLIDE  | \$101 |               |
| 4  |          | 3505-30 | BALL SLIDE  | \$115 |               |
| 5  |          | 3507-05 | BALL SLIDE  | \$85  |               |
| 6  |          | 3507-10 | BALL SLIDE  | \$100 |               |
| 7  | :        | 3507-20 | BALL SLIDE  | \$108 |               |
| 8  | 1 1      | 3507-30 | BALL SLIDE  | \$115 |               |
| 9  |          | 3510-05 | BALL SLIDE  | \$98  |               |
| 10 |          | 3510-10 | BALL SLIDE  | \$104 |               |
| 11 |          | 3510-20 | BALL SLIDE  | \$121 |               |
| 12 |          | 3511-07 | BALL SLIDE  | \$98  |               |
| 13 |          | 3511-15 | BALL SLIDE  | \$104 |               |
| 14 |          | 3511-20 | BALL SLIDE  | \$121 |               |
| 15 | ,        | 3511-30 | BALL SLIDE  | \$135 |               |
| 16 |          | 3511-40 | BALL SLIDE  | \$164 |               |
| 17 |          | 3901    | BALL SLIDE  | \$87  |               |
| 18 |          | 3902    | BALL STAGE  | \$192 |               |
| 19 |          | 3902M   | BALL STAGE  | \$192 |               |
| 20 |          | 3903    | BALL STAGE  | \$185 |               |
| 21 |          | 3905    | BALL SLIDE  | \$91  |               |
| 22 |          | 3906    | BALL STAGE  | \$208 |               |
| 23 |          | 3906M   | BALL STAGE  | \$208 |               |